

AMENDMENTS TO THE CLAIMS

1. (Currently amended) Signal delaying device $[(1)]$ for the dynamic delaying of a digitally sampled input signal with a memory element $[(2)]$ and a series connected interpolation element $[(3)]$, ~~wherein, comprising a register (30), which can be connected to the~~ that has its output side $[(of)]$ connected to the input side of the interpolation element $[(3)]$ for the intermediate storage of at least one sampled value $(S_{in}(k))$ of the input signal $[(,)]$ and is arranged in parallel to the memory element $[(2)]$, ~~and a marking device which, after a sampled value $(S_{in}(k))$ of the input signal has been placed in intermediate storage in the register, adds a marking to the next sampled value $(S_{in}(k+1))$ of the input signal stored in the memory element.~~

2. (Canceled)

3. (Currently amended) Signal delaying device according to claim $[(2)]$ 1, characterized in that the interpolation element $[(3)]$ checks whether the marking has arrived at the output of the memory element $[(2)]$, and following this, reads out a sampled value $(x(k))$ from the memory element $[(2)]$ and also a sampled value from the register $[(30)]$.

4. (Currently amended) ~~Signal delaying device according to any one of claims 1-3, characterized in that~~ Signal delaying device for the dynamic delaying of a digitally sampled input signal with a memory element and a series connected interpolation element, comprising a register having its output side connected to the input side of the interpolation element for the intermediate storage of at least one sampled value $(S_{in}(k))$ of the input signal and arranged in parallel to the memory element, wherein the interpolation element $[(3)]$ comprises a polyphase filter $[(5)]$.

5. (Currently amended) Signal delaying device according to claim 4, ~~characterized in that~~ wherein the interpolation element $[(3)]$ comprises a half-band filter $[(4)]$, which is arranged between the memory element $[(2)]$ and the register on one side, and the polyphase filter on the other side.

6. (Currently amended) Method for the dynamic delaying of a digitally sampled input signal with the following procedural stages:

- ~~storage of the~~ storing sampled values of the input signal in a memory element $[(2)]$,
- reading out of the sampled values ($S_{in}(k)$) from the memory element $[(2)]$,
- ~~interpolation of~~ interpolating the sampled values ($x(k)$) read out from the memory element $[(2)]$, wherein
- whenever the range $[(19)]$ defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is neither undercut nor exceeded in the interpolation, one sampled value ($S_{in}(k)$) is placed into the memory element $[(2)]$ and one sampled value ($x(k)$) is read out from the memory element $[(2)]$,
- whenever the range $[(20)]$ defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is exceeded in the interpolation, no new sampled value ($x(k)$) is read out from the memory element $[(2)]$,
- before the range $[(21)]$ defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is undercut in the interpolation, placing a sampled value ($S_{in}(k)$) of the input signal ~~is placed~~ in intermediate storage in a register $[(30)]$ arranged in parallel to the memory element $[(2)]$, marking the next sampled value ($S_{in}(k+1)$) of the input signal stored in the memory element $[(2)]$ ~~is marked~~, and reading out a sampled value from the memory element $[(2)]$ and also the sampled value placed in intermediate storage in the register $[(30)]$ ~~are read out~~, whenever the marked sampled value arrives at the output of the memory element $[(2)]$.

7. (Currently amended) Method according to claim 6, ~~characterized in that~~ wherein the range $[(20)]$ defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is exceeded, if at least two interpolation values ($S_{out}(k-3)$, $S_{out}(k-2)$) produced by the interpolation fall within this range $[(20)]$.

8. (Currently amended) Method according to claim 6 or 7, ~~characterized in that~~ wherein the range $[(21)]$ defined by two successive sampled values $(x(k-4), x(k-3))$ is undercut in the interpolation, if no interpolation value produced by the interpolation falls within this range.

9. (Currently amended) Method according to any one of claims 6-7, ~~characterized in that~~ wherein storage in the memory element $[(2)]$ takes place by means of a write pointer, and reading out from the memory element $[(2)]$ takes place by means of a read pointer, wherein the write pointer and the read pointer in each case point towards a given memory cell of the memory element,

wherein the write pointer and also the read pointer are adjusted if the range $[(19)]$ defined by two successive sampled values $(x(k-4), x(k-3))$ is neither undercut nor exceeded in the interpolation.

10. (Currently amended) Method according to claim 9, ~~characterized in that~~ wherein only the write pointer but not the read pointer is adjusted, if the range $[(20)]$ defined by two successive sampled values $(x(k-4), x(k-3))$ is exceeded in the interpolation.

11. (Currently amended) Method according to claim 9 ~~characterized in that~~, wherein only the read pointer but not the write pointer is adjusted, if a sampled value is stored in the register $[(30)]$.

12. (Currently amended) Method according to claim 9, ~~characterized in that~~ wherein both the write pointer and also the read pointer are adjusted, if a sampled value is read out from the register $[(30)]$.